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EXAMINER	
MOORE, IAN N	

ART UNIT	PAPER NUMBER
2661	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/725,438	DAS ET AL.	
	Examiner	Art Unit	
	Ian N. Moore	2661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *04 March 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Response to Amendment

1. The objections to the drawings are withdrawn since they are being amended accordingly.

2. The objection to the specification is withdrawn since it is being amended accordingly.

3. Claims 1 and 11 are amended, and new claims 14-20 are added.

4. Claims 1-20 are rejected by the new ground of rejections.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claim 1 and 11 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,721,834. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 and 11 of the instant application merely broadens the scope of the claim 1 of the Patent by eliminating the elements (i.e. "at least in part" and

"based on first receive channel condition information", and "subsequent to the first channel condition information") and their functions of the claims, and renaming "channel condition" with "attribute" limitation. It has been held that the omission an element and its function is an obvious expedient if the remaining elements perform the same function as before. *In re Karlson*, 136 USPQ 184 (CCPA). Also note *Ex parte Rainu*, 168 USPQ 375 (Bd.App.1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

First set of rejection

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claim 1,2,4, 5, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. 4,939,731) in view of Kameda (U.S. 5,940,772).

Regarding Claim 1, Reed discloses a method of transmitting data comprising the steps of:

determining a first data rate based on a measured first channel condition at a receiver to which data transmission is intended (see col. 2, lines 40-51);

determining a second data rate (see col. 5, lines 5-10; channel quality factor of transmission) for transmission to the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10); and

performing a data transmission of the data at the second data rate (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Reed does not explicitly disclose based on an attribute of data. However, Kameda teaches determining a second data rate (see FIG. 2, step 6 or step 16: transmission rate of 4800 BPS or transmission rate of 2400 BPS) based on an attribute of data for transmission (see FIG. 2, steps 4 and 5; steps 14 and 15; the lower transmission rate is determined based upon the number of repeats of channel transmission (i.e. transmission quality/attribute) whether they exceed the limit; see col. 1, lines 33-39; see col. 3, lines 42-50; 53-56) by the receiver (see FIG. 1; receiver of MSC 3 or mobile station 5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to determine transmission rate based on number of repeats of channel transmission, as taught by Kameda in the system of Reed, so that it would provide data transmission rate changes in response to circuit conditions in a radio section which are not always stable, and the use of error controlling mode to achieve maximum transmission efficiency; see Kameda col. 1, line 34-45.

Regarding Claim 2, Reed discloses wherein the first and second data transmissions are identical (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines

10). Kameda also discloses wherein the first and second data transmissions are identical (see col. 3, lines 40-50).

Regarding Claim 4, Reed discloses receiving, prior to the step of determining the first data rate, a rate indication message indicating the first data rate for the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Regarding Claim 5, Reed discloses receiving, after the step of determining the first data rate and prior to the step of determining the second data rate, a rate indication message indicating the second data rate for the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Regarding Claim 11, Reed discloses a method of receiving a data transmission comprising the steps of:

receiving at a receiver a first data transmission at a first data rate, wherein the first data rate is determined using a measured first channel condition (see col. 2, lines 40-51);

and transmitting a rate indication message if the first data transmission was not successfully received at the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10); and

receiving a second data transmission at a second data rate, wherein the second data rate for transmission to the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Reed does not explicitly disclose based on an attribute of data. However, Kameda teaches determining a second data rate (see FIG. 2, step 6 or step 16:

transmission rate of 4800 BPS or transmission rate of 2400 BPS) based on an attribute of data for transmission (see FIG. 2, steps 4 and 5; steps 14 and 15; the lower transmission rate is determined based upon the number of repeats of channel transmission (i.e. transmission quality/attribute) whether they exceed the limit; see col. 1, lines 33-39; see col. 3, lines 42-50; 53-56) by the receiver (see FIG. 1; receiver of MSC 3 or mobile station 5). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to determine transmission rate based on number of repeats of channel transmission, as taught by Kameda in the system of Reed, so that it would provide data transmission rate changes in response to circuit conditions in a radio section which are not always stable, and the use of error controlling mode to achieve maximum transmission efficiency; see Kameda col. 1, line 34-45.

Regarding Claim 12, Reed discloses storing the received first data transmission if the first data transmission was not successfully received at the receiver (see col. 5, lines 39-51).

9. Claim 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Kameda, as applied to claim 1 and 11 above, and further in view of Wang (U.S. 5,838,267).

Regarding Claims 3 and 13, the combined system of Reed and Kameda discloses all limitation as described above in claims 1 and 11. In particular, Reed teaches transmited packet may be stored and combined with the retransmitted

packet (see col. 5, lines 39-51). Neither Reed nor Kameda explicitly disclose soft combining. However, soft combining is well known in the art. In particular, Wang discloses disclose the softcombing (see abstract; see col. 6, lines 26-46). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide soft combining, as taught by Wang, in the combined system of Reed and Kameda, so that it would provide error detecting and correction system (see Wang col. 2, lines 55-60), significant reduction in the residual error rate and frame erasure rate (see Wang col. 2, lines 26-30), and enable efficient reconstruction of the data packets.

10. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. 4,939,731) in view of Kameda (U.S. 5,940,772).

Regarding Claim 6, the combined system of Reed and Kameda discloses all limitation as disclose above in claim 1. Neither Reed nor Kameda explicitly discloses the first data rate is higher than a data rate indicated. However, Reed discloses that baud rate is decreased on a poor channel after transmission (see col. 5, lines 4-7). Kameda discloses after transmission, a first data rate is reduced due to poor channel quality and large number of repetitive requests (see col. 3, lines 35-45). Official Notice is taken that both the concept and the advantages of the first data rate must be higher than the data rate indicated in a rate indication message after transmission since the indicated data rate is decreased due to poor channel quality are well known and expected in the art. Thus, the first data rate being higher or

lower than the indicated rate does not define a patentable distinct invention over that in the combined system of Reed and Kameda since both the invention as a whole and the combined system of Reed and Kameda are directed to adjusting data rate so as to ensure the quality and while maximizing throughput. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set the first data rate higher than indicated rate due to channel quality, in the combined system of Reed and Kameda, so that it would maximize throughput; see Reed col. 5, line 4-7.

Regarding Claim 7, the combined system of Reed and Kameda discloses all limitation as disclose above in claim 1. Neither Reed nor Kameda explicitly discloses the second data rate is higher than a data rate indicated. However, Reed discloses that the baud rate is increased on a good channel (see col. 5, lines 4-7). Kameda discloses after transmission, a second data rate is adjusted due to channel quality and number of repetitive requests (see col. 3, lines 35-45). Official Notice is taken that both the concept and the advantages of the second data rate must be higher than the data rate indicated in a rate indication message after the first data rate transmission due to good channel quality are well known and expected in the art. Thus, the second data rate being higher or lower than the indicated rate does not define a patentable distinct invention over that in the combined system of Reed and Kameda since both the invention as a whole and the combined system of Reed and Kameda are directed to adjusting data rate so as to ensure the quality and while maximizing throughput. Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to set the second data rate higher than indicated rate due to channel quality, in the combined system of Reed and Kameda, so that it would maximize throughput; see Reed col. 5, line 4-7.

Regarding Claim 8, Reed discloses receiving, prior to step of determining the first data rate, a single rate indication message indicating the data rate for a single receiver (see col. 2, lines 40-45). Kameda discloses receiving plurality of messages (see FIG. 1, wire transmission signals/messages, rate messages and error control messages; see col. 2, lines 55-62) for a plurality of receivers (see FIG. 1, Radio Base station receivers 4 or Mobile station receivers 5; see col. 2, lines 40-65; see col. 3, lines 1-6, 15-20). Thus, the combined system of Reed and Kameda discloses receiving, prior to step of determining the first data rate, a plurality of rate indication message indicating the data rate for plurality of receivers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide plurality of receives to receive plurality of messages, as taught by Kameda, in the combined system of Reed and Kameda, so that it would achieve maximum transmission; see col. 1, lines 35-39, and it would also enable the system to function with multiple receivers.

Regarding Claim 9, Reed discloses selection a receiver to which to transmit data using the received rate indication message (see col. 2, lines 40-45). Kameda discloses selecting a receiver from a plurality of receivers (see FIG. 1, Radio Base station receivers 4 or Mobile station receivers 5; see col. 2, lines 40-65; see col. 3, lines 1-6, 15-20) and sending/receiving plurality of messages (see FIG. 1, wire

transmission signals/messages, rate messages and error control messages; see col. 2, lines 55-62). Thus, the combined system of Reed and Kameda discloses selecting a receiver from a plurality of receivers to which to transmit data using the received plurality of rate indication messages. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a mechanism of selecting a receiver from plurality of receives to transmit data, as taught by Kameda, in the combined system of Reed and Kameda, so that it would achieve maximum transmission; see Kameda col. 1, lines 35-39, and it would also enable the system to function with multiple receivers.

Regarding Claim 10, Reed discloses selecting a receiver, which associated with a rate indication message indicating a highest data rate (see col. 2, lines 40-45). Kameda discloses the selected a receiver is a receiver associated with a highest data rate (see FIG. 2, 9800 BPS; see col. 3, lines 29-32). Thus, the combined system of Reed and Kameda discloses the selected receiver associated with a rate indication message indication a highest data rate. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide associating a selected receiver with a highest data rate, as taught by Kameda, in the combined system of Reed and Kameda, so that it would achieve maximum transmission; see Kameda col. 1, lines 35-39, and it would enable the system to select the rout that has the highest throughput.

Second set of rejection

11. Claims 1,2,4, 5, 11, 12, and 14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. 4,939,731) in view of Corke (U.S. 6,414,938).

Regarding Claim 1, Reed discloses a method of transmitting data comprising the steps of:

determining a first data rate based on a measured first channel condition at a receiver to which data transmission is intended (see col. 2, lines 40-51);

determining a second data rate for transmission to the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10); and

performing a data transmission at the second data rate (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Reed does not explicitly disclose based on an attribute of data. However, Corke teaches transmitting determining a second data rate based on an attribute of data for transmission (see FIG. 7, rate/channel quality metric; see FIG. 6, step 604, channel quality metric; also see col. 4, lines 1-10, 20-35, 44-60; see col. 6, lines 15-65; abstract; note that the rate to increase or decrease based upon channel quality metric and/or atomic packet size). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide sending an rate adjustment message which indicates/corresponds the channel quality metric and/or packet size, as taught by Corke in the system of Reed, so that it would improve retransmission data packets in a communication system having variable rates; see Corke abstract and col. 1, line 6-10.

Regarding Claim 2, Reed discloses wherein the first and second data transmissions are identical (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Regarding Claim 4, Reed discloses receiving, prior to the step of determining the first data rate, a rate indication message indicating the first data rate for the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10). Corke discloses receiving, prior to the step of determining the data rate, a rate indication message indicating the data rate for the receiver (see col. 6, lines 40-60).

Regarding Claim 5, Reed discloses receiving, after the step of determining the first data rate and prior to the step of determining the second data rate, a rate indication message indicating the second data rate for the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10). Corke also discloses Corke discloses receiving, prior to the step of determining the data rate, a rate indication message indicating the data rate for the receiver (see col. 6, lines 40-60).

Regarding Claim 11, Reed discloses a method of receiving a data transmission comprising the steps of:

receiving at a receiver a first data transmission at a first data rate, wherein the first data rate is determined using a measured first channel condition (see col. 2, lines 40-51);

and transmitting a rate indication message if the first data transmission was not successfully received at the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10); and

receiving a second data transmission at a second data rate, wherein the second data rate is for transmission to the receiver (see col. 2, lines 40-51; see col. 4, lines 47 to col. 5, lines 10).

Reed does not explicitly disclose based on an attribute of data. However, Corke teaches transmitting a rate indication message (see FIG. 6, step 608 and 616; send shift rate message 608 or 616) indicating a measured second channel condition (see col. 4, lines 1-10, 20-35, 44-60; see col. 6, lines 15-65; abstract; the rate to increase or decrease); and

wherein the second data rate is based on an attribute of data for transmission (see FIG. 7, rate/channel quality metric; see FIG. 6, step 604, channel quality metric; also see col. 4, lines 1-10, 20-35, 44-60; see col. 6, lines 15-65; abstract; note that the rate to increase or decrease based upon channel quality metric and/or atomic packet size). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide sending an rate adjustment message based upon the channel quality metric and/or packet size, as taught by Corke in the system of Reed, so that it would improve retransmission data packets in a communication system having variable rates; see Corke abstract and col. 1, line 6-10.

Regarding Claim 12, Reed discloses storing the received first data transmission if the first data transmission was not successfully received at the receiver (see col. 5, lines 39-51).

Regarding Claim 14, Corke discloses wherein the attributes is a size of the data (see FIG. 9, based on different packet size; see abstract, col. 7, lines 15-46). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to base upon packet size, as taught by Corke in the system of Reed, for the same motivation as stated above in claim 1.

Regarding Claim 15, Corke discloses wherein the second data rate is obtained from a lookup table (see FIG. 1, BTS have memory/table; see FIG. 7, metric which is used to perform rate adaptation is stored the table/memory; see col. 2, lines 35-60; see col. 6, lines 40-35). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to base upon memory/table, as taught by Corke in the system of Reed, for the same motivation as stated above in claim 1.

Regarding Claim 16, Reed discloses wherein the second data rate is equal to the first data rate (see col. 4, lines 30-35; 45-65; ARQ/retransmission).

Regarding Claim 17, Reed discloses wherein the second data rate is multiple of the first data rate (see col. 5, lines 1-15). Corke discloses wherein the second data rate is multiple of the first data rate (see FIG. 6,step 606, 608; col. 6, lines 15-65).

Regarding Claim 18, claim which that substantially discloses all the limitations of the respective claim 14. Therefore, it is subjected to the same rejection.

Regarding Claim 19, claim which that substantially discloses all the limitations of the respective claim 15. Therefore, it is subjected to the same rejection.

Regarding Claim 20, claim which that substantially discloses all the limitations of the respective claim 16. Therefore, it is subjected to the same rejection.

12. Claim 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed in view of Corke, as applied to claim 1and 11 above, and further in view of Wang (U.S. 5,838,267).

Regarding Claims 3 and 13, the combined system of Reed and Corke discloses all limitation as described above in claims 1 and 11. In particular, Reed teaches transmitted packet may be stored and combined with the retransmitted packet (see col. 5, lines 39-51). Neither Reed nor Kameda explicitly disclose soft combining. However, soft combining is well known in the art. In particular, Wang discloses disclose the softcombing (see abstract; see col. 6, lines 26-46). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide soft combining, as taught by Wang, in the combined system of Reed and Corke, so that it would provide error detecting and correction system (see Wang col. 2, lines 55-60), significant reduction in the residual error rate and frame erasure rate (see Wang col. 2, lines 26-30), and enable efficient reconstruction of the data packets.

13. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reed (U.S. 4,939,731) in view of Corke.

Regarding Claim 6, the combined system of Reed and Corke discloses all limitation as disclose above in claim 1. Reed discloses that baud rate is decreased

on a poor channel after transmission (see col. 5, lines 4-7). Corke discloses the first data rate is higher than a data rate indicated in a received rate indication message (see FIG. 6, step 614 and 616, sending shift rate down message; see col. 6, lines 55-65; since the data rate is shift down from the first data rate, the first data rate must be higher than the shift down rate in the shift down message). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the first data rate higher than shift down rate, in the combined system of Reed and Corke, so that it would maximize throughput; see Reed col. 5, line 4-7.

Regarding Claim 7, the combined system of Reed and Corke discloses all limitation as disclose above in claim 1. Reed discloses that the baud rate is increased on a good channel (see col. 5, lines 4-7). Corke discloses the second data rate is higher than a data rate indicated (see FIG. 6, step 606 and 608, sending shift rate up message; see col. 6, lines 45-55; the new data rate is higher than the shift up rate in the shift up message). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to set the second data rate higher than indicated rate due to channel quality, in the combined system of Reed and Corke, so that it would maximize throughput; see Reed col. 5, line 4-7.

Regarding Claim 8, Reed discloses receiving, prior to step of determining the first data rate, a single rate indication message indicating the data rate for a single receiver (see col. 2, lines 40-45). Corke discloses receiving plurality of messages (see FIG. 1, signaling messages; see col. 2, lines 45-50) for a plurality of

receivers (see FIG. 1, Radio Base station receivers 104 and 103 or Mobile stations receivers 102; see col. 2, lines 45-50). Thus, the combined system of Reed and Corke discloses receiving, prior to step of determining the first data rate, a plurality rate indication message indicating the data rate for plurality receivers. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide plurality of receives to receive plurality of messages, as taught by Corke, in the combined system of Reed and Corke, so that it would improve the method of retransmitting data packets in a communication system having variable bit rates; see Corke col. 1, lines 9-10, and it would also enable the system to function with multiple receivers.

Regarding Claim 9, Reed discloses selection a receiver to which to transmit data using the received rate indication message (see col. 2, lines 40-45). Corke discloses selecting a receiver from a plurality of receivers (see FIG. 1, Radio Base station receivers 104 and 103 or Mobile stations receivers 102; see col. 2, lines 45-50) and sending/receiving plurality of messages see FIG. 1, signaling messages; see col. 2, lines 45-50). Thus, the combined system of Reed and Corke discloses selecting a receiver from a plurality of receivers to which to transmit data using the received plurality of rate indication messages. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a mechanism of selecting a receiver from plurality of receives to transmit data, as taught by Corke, in the combined system of Reed and Corke, so that it would improve the method of retransmitting data packets in a communication system

having variable bit rates; see Corke col. 1, lines 9-10, and it would also enable the system to function with multiple receivers.

Regarding Claim 10, Reed discloses selecting a receiver, which associated with a rate indication message indicating a highest data rate (see col. 2, lines 40-45). Corke discloses the selected a receiver is a receiver associated with a higher data rate (see col. 4, lines 44-50). Thus, the combined system of Reed and Corke discloses the selected receiver associated with a rate indication message indication a highest data rate. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide associating a selected receiver with a high data rate, as taught by Corke, in the combined system of Reed and Corke, so that it would improve the method of retransmitting data packets in a communication system having variable bit rates; see Corke col. 1, lines 9-10, and it would enable the system to select the rout that has the highest throughput.

Response to Arguments

14. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claims 1 and 11, the applicant argued that, "...a channel condition is a characteristic of a transmission channel is not the same as an attribute of data for transmission **such as the data size**..." in page 8, paragraph 2.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant

relies (i.e., **the data size**) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Regarding claims 1 and 11, the applicant argued that, "...Reed and Kameda alone in combination fail to teach or suggest the claimed invention ..an attribute of the data transmission when determining a data transmission rate..." in page 8, paragraph 2.

In response to applicant's argument, the examiner respectfully disagrees that Reed and Kameda alone in combination fail to teach or suggest the argued claimed invention. Kameda teaches determining a second data rate (see FIG. 2, step 6 or step 16: transmission rate of 4800 BPS or transmission rate of 2400 BPS) based on an attribute of data for transmission (see FIG. 2, steps 4 and 5; steps 14 and 15; the lower transmission rate is determined based upon the number of repeats of channel transmission (i.e. transmission quality/attribute) whether they exceed the limit; see col. 1, lines 33-39; see col. 3, lines 42-50; 53-56) by the receiver (see FIG. 1; receiver of MSC 3 or mobile station 5).

Regarding claims 1 and 11, the applicant argued that, "...Reed and Corke alone in combination fail to teach or suggest the claimed invention ..an attribute of the data transmission when determining a data transmission rate..." in page 10, paragraph 1-2.

In response to applicant's argument, the examiner respectfully disagrees that Reed and Corke alone in combination fail to teach or suggest the argued claimed invention. Corke teaches transmitting determining a second data rate based on an attribute of data for transmission (see FIG. 7, rate/channel quality metric; see FIG. 6, step 604, channel quality metric; also see col. 4, lines 1-10, 20-35, 44-60; see col. 6, lines 15-65; abstract; note that the rate to increase or decrease based upon channel quality metric and/or atomic packet size).

In view of the above, **the examiner respectfully disagrees** with applicant's argument and believes that the combination of references as set forth in the 103 rejections are proper.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N. Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9:00 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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BOB PHUNKULH
PRIMARY EXAMINER